



Departee Creek Watershed Project

PL83-566



OVERVIEW

This project reduces flood damages by 73 percent, provides a fishing lake, creates or preserves 2,600 acres of forested wetlands, reduces scour erosion by 65 percent and annual sediment deposition by 4,900 tons per year. Other environmental benefits include the Lake Whitstine weir and beaver control.

The Departee Creek Watershed Plan was approved in August 2000 and updated/revised in January 2018 under the authority of Public Law 83-566. The Watershed Plan consists of structural and non-structural measures which will be installed in the watershed to reduce flooding, sediment and scour damages on crop and pasture in the 12,650-acre problem area. Flood damages to roads, bridges, and agricultural property will be reduced. Wetlands, fish and wildlife habitat, cultural resources, and Lake Whitstine will be protected.

PROJECT GOALS

The Watershed Plan consists of structural and non-structural measures which will be installed in the watershed to reduce flooding, sediment and scour damages on crop and pasture in the 12,650-acre problem area. Flood

damages to roads, bridges, and agricultural property will be reduced. Wetlands, fish and wildlife habitat, cultural resources, and Lake Whitstine will be protected.

DESCRIPTION OF WORK

The Departee Creek Watershed Project contains three elements for construction:

- selective clearing and snagging along select sections of main channel;
- construction of a low water weir at the outlet of Lake Whitstine designed to control sediment and other debris from moving down stream and to maintain the historical water level in the lake; and
- construction of a floodwater retarding structure (dam) upstream of channel.

In addition to the construction work, 600-900 acres of conservation easements will be acquired in low lying cropland areas which will still experience some flooding after the project is completed.

The main purpose of clearing out about 12.5 miles of the channel is the removal of all woody vegetation (cleared and snagged) within the confines of the main creek stream bed and removal of trees along the bank that are judged to be



Before December 2016.



After June 2019.

unstable and present a danger of falling into the stream. This part of the project was completed in 2018.

The Lake Whitstine Weir is a structure for water control. The 140-foot wide by 30-foot long weir is constructed with broad-crested rock riprap with a crushed rockfill core. The sole purpose of the weir is to act as a hydraulic grade control structure to ensure that Lake Whitstine is not drained down by selective clearing and snagging conducted on downstream segments of Departee Creek. The weir was completed in 2019.

The floodwater retarding structure (dam) is designed to store rainfall runoff and reduce downstream flooding damages. Once completed it will create a 178-acre lake. The lake will not only provide flood control but also recreation opportunities. Construction on the dam is scheduled to begin in the summer of 2022.

PARTNERS

The project is a joint effort between the Natural Resources Conservation Service (NRCS), Departee Creek Watershed Improvement District, Independence County Conservation

District, Jackson County Conservation District and Arkansas Game and Fish Commission.

FOR MORE INFORMATION

For more information about the Departee Creek Watershed Project or NRCS Watershed Program, contact Randy Childress at (501) 301-3131 or visit the NRCS Arkansas Web site at: www.ar.nrcs.usda.gov.



Removing logs from Departee Creek.



Construction work on the Lake Whitstine weir.



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